

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	6729	375/260-261.ccls. or 375/136.ccls. or 375/142-145.ccls. or 375/147-153.ccls. or 375/298.ccls. or 375/320.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 12:58
L2	9	L1 and (constellation same (minimum with probability) same (distance or seperat\$5))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 13:02
L3	5	L1 and (constellation same (minimum with probability) same (distance or seperat\$5)) and (signal adj2 (noise or interference) adj3 ratio)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 13:03
L4	28	(constellation same (minimum with probability) same (distance or seperat\$5)) and (signal adj2 (noise or interference) adj3 ratio)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 13:04
L5	23	L4 not L2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 13:04
L6	67	(Kullback adj1 Leibler) and (points same distance)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 13:04
L7	84	(Kullback adj1 Leibler) and (points same (distance or separat\$4))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 13:05
L8	103	L7 or L5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 13:05
S1	24	(Borran.in. or varshney.in. or Lilleberg.in.) and probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 12:04
S2	12	S1 and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 12:26
S3	0	375/295.ccls. and constelllation and (distance same probability)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/07 14:42

## EAST Search History

S4	16	375/295.ccls. and constellation and (distance same probability)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/07 14:42
S5	20	375/295.ccls. and constellation and (distance same probability)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 13:59
S6	20	(map\$4 same constellation) and (distance same (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:00
S7	20	S6 not S%	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:00
S8	20	375/295.ccls. and constellation and (distance same probability)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:00
S9	19	S6 not S8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:07
S10	91	(points with distance) same (probability adj1 distribution)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:08
S11	90	S10 not S8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:08
S12	77	S11 not S6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:08
S13	5	S12 and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:09
S14	0	(map\$4 same constellaiton) and pilot and multi-carrier and (estimat\$4 near3 channel) and (demap\$4 or de-map\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/08 14:27
S15	52	(map\$4 same constellation) and pilot and (multicarrier or multi-carrier) and (estimat\$4 near3 channel) and (demap\$4 or de-map\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/08 14:28

## EAST Search History

S16	6	(map\$4 same constellation) and pilot and (multicarrier or multi-carrier) and (estimat\$4 near3 channel) and (demap\$4 or de-map\$4) and circle	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/08 14:28
S17	9	(map\$4 same constellation) and pilot and (multicarrier or multi-carrier) and (estimat\$4 near3 channel) and (demap\$4 or de-map\$4) and circle	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:33
S18	55	(map\$4 same constellation) and pilot and (multicarrier or multi-carrier) and (estimat\$4 near3 channel) and (demap\$4 or de-map\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:28
S19	67	Kadous.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:33
S20	16	Kadous.in. and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:35
S21	16	Kadous.in. and constellation and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:34
S22	5	Kadous.in. and constellation and pilot and demap\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:34
S23	0	Kadous.in. and constellation and pilot and de-map\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 14:34
S24	16	Kadous.in. and constellation and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 16:19
S25	43	constellation and (points with (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:03
S26	44	constellation same (minimum with probability) same (distance or seperat\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 12:59

## EAST Search History

S27	25	constellation same (minimum near3 probability) same (distance or seperat\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 13:13
S28	24	S27 not S25	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:04
S29	20	375/295.ccls. and constellation and (distance same probability)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:04
S30	22	S28 not S29	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:09
S31	22	S30 and probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:15
S32	5	constellation same (distance with (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:16
S33	11	constellation and (distance with (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:18
S34	28	constellation same (points with (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:23
S35	2	constellation same (points with (probability adj1 distribution)) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:25
S36	5	constellation and (points with (probability adj1 distribution)) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:24
S37	5	(constellation same (probability adj1 distribution)) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:25
S38	88	(constellation and (probability adj1 distribution)) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:25

## EAST Search History

S39	6	constellation and (points same (probability adj1 distribution)) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:25
S40	72	constellation and map\$4 and (probability adj1 distribution) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 18:00
S41	5	constellation and map\$4 and ((distance or separat\$4) same (probability adj1 distribution)) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/08 17:30
S42	2	("5838728").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/08 17:30
S43	1	S42 and probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/08 17:31
S44	6	("20020131515" "20030126536" "5828695").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 16:15
S45	8	((("4,891,823") or ("5,267,021") or ("5,537,430") or ("6,097,764"))).PN. or ((2001/0031019) or (2003/0123877) or (2003/0210824)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/08 17:36
S46	3	S45 and probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/08 17:36
S47	14	((("20010031019") or ("20030123877") or ("20030210824") or ("4,891,823") or ("5,267,021") or ("5,537,430") or ("6,097,764"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/08 17:36
S48	1401	(map\$4 same distance same (probability distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 11:15
S49	53	(map\$4 same distance same (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 11:16

## EAST Search History

S50	7	(map\$4 same distance same (probability adj1 distribution)) and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 11:17
S51	33	pilot and (map\$4 same probability same distance)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 11:18
S52	4	constellation same (minimum near3 probability) same (distance or seperat\$5) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 13:13
S53	7	constellation same (minimum with probability) same (distance or seperat\$5) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 13:15
S54	5	(constellation same (probability adj1 distribution)) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 13:19
S55	0	(constellation same points same probability) and pilto	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 13:19
S56	65	(constellation same points same probability) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 14:52
S57	65	(constellation same points same probability) and pilot and probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 14:56
S58	80	((distance or seperat\$4) near3 probability) and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 14:57
S59	13	((distance or seperat\$4) near3 probability) and constellation and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 15:09
S60	1	Kullbeck-Leibler	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 15:09
S61	127	(Euclidean same probability) and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 15:13

## EAST Search History

S62	0	S61 and pilto	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/09 15:13
S63	32	S61 and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/10 10:51
S64	80	constellation and ((distance or seperat\$4) near3 probability)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/10 10:56
S65	13	S64 and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/10 10:52
S66	11	constellation and ((distance or seperat\$4) with (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/10 12:26
S67	24	(Borran.in. or varshney.in. or Lilleberg.in.) and probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 12:26
S68	5	S67 and constellation and (angle or angular)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 12:27
S69	72	constellation and ((max\$4 or high\$4) with minimum with (angle or angular))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 12:29
S70	41	constellation and ((max\$4) with minimum with (angle or angular))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 12:31
S71	28	map\$4 and (equal\$4 with spac\$4 with pilot)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 15:12
S72	37	taps same (estimat\$4 near3 variance)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 12:32
S73	7	S72 and (pilot same taps)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 12:32

## EAST Search History

S74	37	(constellation same (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/11/10 15:12
S75	66	constellation and ((distance or separat\$4) same log adj2 likelihood)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/11/11 10:41
S76	19	constellation and (map\$4 same (distance or separat\$4) same log adj2 likelihood)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 16:46
S77	25	(Borran.in. or varshney.in. or Lilleberg.in.) and probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 12:25
S78	175	constellation and ("max" near2 "min")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 12:26
S79	25	(Borran.in. or varshney.in. or Lilleberg.in.) and probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 16:58
S80	102	((max or maximum) adj3 Euclidean)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 13:47
S81	40	S80 and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 14:10
S82	36	Euclidean near3 probability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 13:53
S83	32	("max" near2 "min") and ((distance same points) same constellation)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 14:11
S84	123	("max" near2 "min") and ((distance same points) same constellation)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 16:45
S85	21	(constellation same points) and (points same distance same ((maximum\$4 or maximized) near1 (minimum\$4 or minimized)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 14:59



## EAST Search History

S86	7	(constellation same points) and (points same distance same ((maximum\$4 or maximized) near1 (minimum\$4 or minimized))) and pilot	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 14:24
S87	17	(constellation same points) and (points same distance same ((maximum\$4 or maximized) near1 (minimum\$4 or minimized))) and (estimat\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 14:47
S88	5	(constellation same points) and (points same distance same ((maximum\$4 or maximized) near1 (minimum\$4 or minimized))) and (multi-carrier or multicarrier)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 14:47
S89	3	(constellation same points) and (points same distance same ((maximum\$4 or maximized) near1 (minimum\$4 or minimized)) same probability)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 14:59
S90	6	(Borran.in. or varshney.in. or Lilleberg.in.) and probability and (multicarrier or multi-carrier)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 15:07
S91	3	(Borran.in. or varshney.in. or Lilleberg.in.) and probability and (averag\$4 with power)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 15:08
S92	57	(Kullback adj1 Leibler) and (points same distance)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/09 13:04
S93	22	(Kullback adj1 Leibler) same (points same distance)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 16:43
S94	4	375/295.ccls. and ("max" near2 "min") and ((distance same points) same constellation)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 16:45
S95	14	(constellation and max\$5 and (min\$4 or minimum) and distance and probability).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/10 16:47
S96	5	("2003007697").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 16:58

## EAST Search History

S97	2	("20030076797").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 17:03
S98	2	("20030210824").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/10 17:03
S99	83	((maximum adj1 likelihood) with (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/30 07:43
S10 0	4	S99 and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/30 07:43
S10 1	188	((maximum adj1 likelihood) same (probability adj1 distribution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/30 07:43
S10 2	10	S101 and constellation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/30 08:06
S10 3	2	"6002713".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/30 08:06